



ISSUES IN BRIEF

Sustainable Development in Africa: Agriculture, Trade and Climate Change



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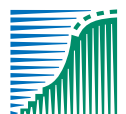
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Sustainable development is commonly understood as environmental, economic and social progress that takes into account the limits of the world's natural resources. For Africa, agriculture plays a key role in the continent's sustainable development. The economic and social importance of the agricultural sector for Africa is obvious: the majority of the continent's population lives in rural areas and agriculture provides livelihoods for approximately two-thirds of African workers, many of whom are self-employed farmers and women. The sector is estimated to account for an average of 21 percent of the continent's Gross Domestic Product (GDP) and generate nearly half of its foreign currency earnings. While Africa's share of global agricultural exports has recently increased to approximately three percent, the continent is still a net importer of food. Millions of Africans are chronically hungry, a situation aggravated by the recent global food crisis, which has trebled Africa's cereal import bill. These problems have caused African leaders and the international community to pay increasing attention to the underperformance by Africa's agricultural sector and the ensuing negative consequences on the continent's efforts to achieve sustainable development.

From a sustainable development perspective, the key objectives for Africa's agricultural sector are hunger reduction and food security. In addition, agriculture could play an important role in reducing rural poverty and improving the situation of small hold farmers. Increasing agricultural exports and shifting production towards high-value crops, processed products and horticulture could also increase Africa's foreign earnings and its role in the international agricultural markets. Africa's sustainable development through the agricultural sector is, however, facing several challenges. These range from the lack of investment and

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infrastructure to institutional and legal issues, such as land ownership and property rights. Long-term prospects of Africa's agricultural sector are also beset by environmental problems, such as climate change, desertification and land degradation. Therefore, it is important to ensure that growth is based on sustainable forms of agriculture that take into account the physical environment as well as social factors. These concerns also bring to the fore specific controversies such as those surrounding the cultivation of genetically modified crops and the allocation of land for the production of biofuels. There are also worries that up-scaling agricultural production could lead to a large-scale transformation from self-sustaining farming communities toward an increased population of food-dependent landless wage laborers (UN 2008, 12).

Many of these challenges are being addressed through national and regional initiatives, including the Comprehensive Africa Agriculture Development Programme (CAADP), which was launched by the New Economic Partnership for African Development (NEPAD) in 2003 and aims to harness agriculture as an "engine of growth" for Africa. Assistance from Africa's international development partners as well as foreign investment play an important role in implementing the CAADP and other initiatives. International cooperation in the broader sense determines the context in which the development of Africa's agricultural sector is taking place. Specific issues such as desertification and genetic engineering are being addressed through the United Nations Convention to Combat Desertification (UNCCD) and the Cartagena Protocol on Biosafety.

This paper focuses on two other areas of international cooperation, namely trade and climate change. The international trade regime, administered by the World Trade Organization (WTO), determines market access and conditions for African agricultural exports. International cooperation on climate change under the United Nations Framework Convention on Climate Change (UNFCCC or Climate Change Convention) plays a role in determining the scale of long-term climate change impacts on Africa and is likely to become the main tool for generating international funding for adaptation and other climate change related projects in Africa. The key question addressed in this paper is how these two regimes can contribute to the sustainable development of Africa's agricultural sector in the long-term.

Promoting Sustainable Development through Agricultural Exports: Africa and the WTO

In comparison to other regions, agriculture continues to play an important role in African economies, which also tend to remain focused on the exports of primary products (UNCTAD 2008, 29-30). Agricultural exports thus constitute an important source of foreign earnings for many African countries, as shown below.

Agriculture's share of total merchandise exports in 2008

Côte d'Ivoire	45 %	Malawi	87%
Ethiopia	80 %	Uganda	56%
Ghana	43%	Tanzania	44%
Kenya	55%		

Source: WTO, 2008

However, Africa's share of the world agricultural market is relatively modest and it has been losing market share to other developing countries from Latin America and South and South East Asia. In 2008, Africa's exports amounted to roughly three percent of the world's total agricultural exports (WTO 2008, 48). The European Union (EU), with its 50 percent share, is their major destination (WTO 2008, 48).

There are several challenges concerning Africa's agricultural exports. Between 2002 and 2005 approximately 56 percent of total sub-Saharan African agricultural exports originated from just three countries: Côte d'Ivoire, Ghana and South Africa (UNCTAD 2008, 30). In addition, many countries in sub-Saharan Africa have tended to export similar products – coffee, cotton, cocoa, tobacco, tea and sugar – thus competing with each other. Exports of primary products are vulnerable to prices on the world market, meaning that the value of African traditional commodity exports stagnated until after 2000 (UNCTAD 2008, 30). In contrast, countries in Latin America and Asia experienced substantial increases in the value of agricultural exports between 1995 and 2006 due to movement towards high-value exports and increased productivity in traditional exports through intensive farming practices (UNCTAD 2008, 33). Hence the argument that African countries should also strive to diversify their agricultural export portfolios to non-traditional commodities such as flowers, vegetables and fish and encourage exports of processed products. There are some positive examples in this regard: between 2000 and 2007, exports of cut flowers from sub-Saharan Africa grew at an annual rate of 20 percent and Africa's share of world exports doubled to eight percent during this period (WTO 2008, 41). South Africa now ranks among the world's top 20 horticultural exporters, while the other top African producers, Kenya and Côte d'Ivoire, hold a market share of less than one percent each (UNCTAD 2008, 32). As a result of the global food crisis, foreign investors have been interested in expanding export-oriented food production as well as biofuels production in Africa (UN 2008, 12). What, then, is the role of international trade regime in promoting sustainable agriculture and agricultural exports from Africa?

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The key instruments determining the international legal framework for Africa's agricultural exports are rules adopted under the WTO as well as agreements with Africa's key trading partners, including the Cotonou Agreement, which is in the process of being replaced by Economic Partnership Agreements with the European Community. Under the WTO, trade in agricultural products is regulated under the Agreement on Agriculture (AoA), negotiated during the Uruguay Round and in force since 1995. The AoA represented a significant step towards trade liberalization in the agricultural sector, which has traditionally been subject to heavy protectionism. The AoA improved market access by introducing the principle that quotas and other non-tariff measures must be replaced by tariffs. It also contains rules to limit subsidies for domestic agricultural production and agricultural exports. Despite these important steps, agricultural trade remains subject to several distortions and efforts are ongoing under the WTO for further liberalization. Another relevant trade scheme is the Generalized System of Preferences through which many OECD countries have granted non-reciprocal trade preferences to African countries. For instance, most agricultural exports from African least developed countries (LDCs) enjoy duty and quota free access to the European Union (EU) through the Everything But Arms initiative, and to the US through the African Growth and Opportunity Act.

For many African countries, the key focus in the international trade arena is on non-tariff trade barriers, including subsidies, rules of origin, technical barriers to trade, sanitary and phytosanitary measures and aid for trade. Trade-distorting agricultural subsidies by industrialized countries have been identified as one of the main challenges to increasing agricultural exports from Africa. They have been blamed for reducing African farmers' income by leading to additional production and for depressing prices of agricultural products on the world market. This reduces incentives to increase agricultural production and exports in poor African countries (UNCTAD 2008, 48). Subsidies have also been blamed for aggravating

environmental problems, such as desertification, by forcing poor countries to practice more intensive forms of agricultural production. Cotton is a classic example of the negative impacts of industrialized countries' agricultural subsidies on Africa. Cotton production is heavily subsidized by the US, which is the world's second largest cotton producer and its largest exporter, meaning that it influences prices on the world market. The key cotton producers in Africa are Benin, Burkina Faso, Chad and Mali with an eight percent share of the world's cotton trade. They are also some of the world's poorest countries and cotton amounts to between two-and-a-half and seven percent of their GDP and provides employment for an estimated two million workers (Alston et al. 2007, 2). American cotton subsidies have been

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found to result in lower cotton prices on the world market, thus reducing the income of cotton farmers in Western Africa and elsewhere (Alston et al. 2007, 1). The US subsidies program has been subject to a WTO dispute initiated by Brazil, where it was found to violate WTO rules, including the AoA (WTO, 2005). While the US has subsequently implemented some changes to its program, Oxfam America has estimated that a further reform of the US subsidies would substantially benefit 10 million Western Africans by increasing their income from cotton between eight and 20 percent (Alston et al. 2007, 11). Western African cotton producing countries also have launched an initiative in the context of the WTO Doha Development Round to eliminate cotton subsidies and to improve the situation for African cotton producers.

In the context of international trade, African agricultural production and long-term sustainable development would benefit from further elimination of agricultural subsidies by developed countries. While there is strong evidence to support this argument, it is useful to bear in mind that the impact of all agricultural subsidies on Africa is not as straightforward as it seems to be in the case of cotton. Subsidies are often not the only problem hampering Africa's exports; a host of other internal and external factors also can be identified. Many African countries are also highly dependent on cereal imports (UNCTAD 2008, 38) and benefit from world market prices that are artificially lower due to industrialized agricultural subsidies. Thus, when eliminating industrialized countries' subsidies, food importing poor countries would need assistance to adjust to the higher prices. On the other hand, African import tariffs tend to be high, and in response to the food crisis, many African governments have suspended import tariffs for key cereals.

From the perspective of international trade, various environmental, technical and health standards are also important for market access by African agricultural exports. Developed

countries are increasingly setting high quality standards for products entering their markets. This trend is problematic for many sub-Saharan African countries lacking the technical capacity and resources to comply with such requirements. For instance, in the late 1990s, the EU banned fish imports from Kenya, Mozambique, Uganda and Tanzania because of concerns related to sanitary standards and control systems — a measure estimated to have resulted in losses amounting to US\$36.9 million for Ugandan fishermen and an 80 percent loss in income for fishermen in Tanzania. (UNCTAD 2008, 49). For African exporters of cereals, fruits, vegetables and nuts, the World Bank has estimated that the annual cost of complying with the EU's requirements of aflatoxins that are stricter than those of the Joint FAO/WHO Expert Committee on Food Additives is about US \$670 million (UNCTAD 2008, 50). In light of these examples, it is clear that long-term planning in the context of African agricultural exports would also necessitate improving international cooperation in these areas, including through technical assistance programs, to help African agricultural exporters to meet reasonable quality requirements for market entry.

Responding to Climate Change: Adaptation and Funding Opportunities for Africa under the UN Climate Change Convention

When thinking about long-term sustainable development through the agricultural sector in Africa, climate change is one of the key factors to consider. While African farmers have been automatically adapting to changing environmental circumstances for a long time, the impacts of anthropogenic climate change are estimated to take this challenge to a whole new level, requiring new resources and long-term planning. In its Fourth Assessment Report, the Intergovernmental Panel on Climate Change (IPCC) indicates that Africa is one of the continents most vulnerable to adverse impacts of climate change. The drivers for such vulnerability include drought, land degradation, poverty and declining agricultural productivity. The IPCC estimates that “agricultural production in many African countries and regions will likely be severely compromised by climate change,” which would have negative effects on food security and exacerbate malnutrition (IPCC 2007, 48). In some countries, yields from rain-fed agriculture could be reduced by up to 50 percent by 2020 (IPCC 2007, 48). These predictions are alarming and without appropriate responses in terms of both mitigation and adaptation, climate change could seriously challenge the vision of agriculture as an engine for Africa's growth and sustainable development in the long-term. As some climate change impacts are already recognized as unavoidable, adaptation is receiving increasing attention in the international arena and under the UN Climate Change Convention.

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For the agricultural sector in general, the impacts of climate change are different across regions and over time (UNFCCC 2007, 99). In Africa, climate change is projected, among other things, to alter the dynamics of drought, rainfall and heat waves, and trigger secondary stresses, such as the spread of pests, increased competition for resources and biodiversity losses (Ziergovel et al. 2008, 18). It is therefore important to build climate resilience in Africa's

agricultural sector, which also includes building institutional capacity for effective action (Ziergovel et al. 2008, 18-20). Other possible measures could include awareness-raising campaigns on the effects of climate change; training of technical staff; and growing adapted crop varieties, among other methods (UN 2008, 14).

Securing adequate financial resources for adaptation is one of the key long-term issues to be addressed through international cooperation and under the UN Climate Change Convention. In addition to conventional sources, such as official development assistance (ODA), dedicated mechanisms and new innovative funding sources are likely to play an important role in this regard. Three funds under the Convention already provide funding for adaptation projects in developing countries: the Special Climate Change Fund (SCCF), the Least Developed Countries (LDC) Fund and the Adaptation Fund. The Adaptation Fund is unique in that it receives funding from the Kyoto Protocol's Clean Development Mechanism (CDM) through a two percent levy on the sale of carbon credits. Assuming annual sales of 300 to 450 million credits, the Adaptation Fund would receive US \$80-300 million each year between 2008 and 2012 (UNFCCC 2007, 169). It is clear, however, that in the long term a large amount of new and additional investment and financial flows will be needed to address climate change adaptation (UNFCCC 2007, 176). For agriculture, forestry and fisheries globally, it is estimated that about US \$14 billion in investment and financial flows will be needed by 2030, to be spent mostly on production and processing but also on research and development (UNFCCC 2007, 176).

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There are various international initiatives to increase adaptation funding in the long term. One idea that originates from Africa would take advantage of the carbon market for the benefit of the African agro-forestry sector. While the CDM is widely seen as one of the most successful aspects of the Kyoto Protocol, few countries in the sub-Saharan Africa have benefited from international carbon financing. Those investing in CDM projects tend to favor economically and institutionally strong developing countries in Asia and Latin America. As of January 2009, Africa was hosting only 29 registered CDM projects, while the respective figures were 957 for Asia and Pacific, and 396 for Latin America and the Caribbean. In light of CDM statistics, regional distribution of projects has been recognized as a problem and efforts are ongoing to improve the situation. Many African countries have argued that such efforts should focus on the agro-forestry sector

where Africa holds important potential for climate change mitigation. In December 2008, 25 African countries launched an initiative known as the African Climate Solution, describing it as the most ambitious initiative toward climate change mitigation, adaptation and improvement of rural livelihoods for the continent (FANRPAN 2008). The proposal would involve carbon crediting in Africa for activities such as reducing deforestation and forest degradation, agro-forestry, re-vegetation of degraded lands, biomass substitution, reduced soil tillage and sustainable agricultural practices (FANRPAN 2008). While such proposals are likely to involve political and methodological challenges, it is important to carefully examine innovative ideas that could assist Africa's agricultural sector to attract funding for sustainable development and climate change adaptation.

Conclusions

For Africa's long-term sustainable development, agriculture is of crucial importance. Given that millions of Africans are chronically hungry, immediate objectives for the agricultural sector include addressing food-related concerns with a view to eliminating hunger and improving Africa's food security. As the continent remains a net importer of food, the cereal import bill constitutes a considerable economic burden for many poor sub-Saharan countries and their populations. Agricultural production should thus be increased to a level that can meet the needs of the growing population. However, more ambitious visions for Africa's agricultural sector seem justified given the availability of land and labor. Boosting agricultural exports by focusing on suitable products that take into account the physical environment could promote Africa's sustainable development, for instance, by reducing rural poverty and improving the situation of women and children.

How to realize such visions? National and regional initiatives play a key role in harnessing agriculture as an engine for Africa's growth. However, international cooperation on issues such as trade and climate change also influence the long-term prospects of the sector. As discussed here, some of the current international trade rules make it difficult for African agricultural exports to compete on the world market. Agricultural subsidies by industrialized countries are one of the key disincentives in this regard. In many cases, the elimination of subsidies could result in higher income to African producers, thereby improving the situation of small hold farmers and rural populations, often seen as the key for sustainable development. To expand their trade, many African countries would also need assistance with regard to health, environmental and technical standards imposed by industrialized countries on products entering their markets.

Addressing environmental problems such as desertification, land-degradation and climate change is fundamentally important for Africa's agricultural sector in the long term. Climate change is predicted to pose considerable challenges for Africa and could drastically reduce rain-fed agricultural productivity by as soon as 2020. To promote the continent's long-term sustainable development, it is imperative to increase adaptive capacity in the agricultural sector and secure adequate financial resources for this task. Demographic growth projections also stress the importance of finding solutions that secure livelihoods for rural populations through sustainable farming that allows self-sustaining communities to remain that way. Some innovative ideas and proposals are currently emerging from African countries on how to attract new financial resources for projects that address, among other things, deforestation and forest degradation as well as promote the use of sustainable agricultural practices. In light of the seriousness and urgency of the threat that climate change poses to Africa, it is important to further develop and explore these ideas and turn them into practical solutions that enable Africa's environment and population to follow a path of long-term sustainable development. ●

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